

ABSTRACT

Non-volatile latch circuit 10 of the present invention comprises ferroelectric capacitor 1 provided with a first electrode 1a, second electrode 1b, and
5 ferroelectric film 1c that lies between these electrodes; reset terminal Tre that is connected to first electrode 1a and a CMOS inverter element 2 that is connected to second electrode 1b of ferroelectric capacitor 1; voltage
switching terminal Tpl that applies a voltage to second
10 electrode 1b; switching element 5 that is connected between second electrode 1b and second input terminal Tpl and switches a voltage applied to second electrode 1b; and set terminal Tse that applies a voltage for switching on or off switching element 5, wherein the voltage generated
15 in second electrode 1b caused by polarization retained by ferroelectric film 1c is higher than the threshold voltage Vtn of NMISFET 4 of CMOS inverter element 2.